



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/258,151	02/26/1999	LARS HAKAN PALM	2380-96	3428

7590 12/22/2003

NIXON & VANDERHYE
1100 N GLEBE ROAD
8TH FLOOR
ARLINGTON, VA 22201

EXAMINER

PERSINO, RAYMOND B

ART UNIT	PAPER NUMBER
----------	--------------

2682

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

Office Action Summary

Application No.

09/258,151

Applicant(s)

PALM ET AL.

Examiner

Raymond B. Persino

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The language used, "RAN identifier in association with another" leaves open what the "another" is. Is it another RAN identifier, another identifier, or something else?

3. Claim 47 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The language used, "The apparatus only the mobile terminal identifier after making initial contact in the new geographical coverage area" doesn't make sense. The examiner believes this claim was intended to be a dependent claim.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-11, 13-24, 26, 27, 29, 31-34 and 36-50 are rejected under 35 U.S.C. 102(a) as being anticipated by MUSTAJARVI et al (WO 98/32304 A2).

Regarding claim 1, MUSTAJARVI et al discloses a radio communications system including a core network coupled to a radio access network (RAN) and a plurality of mobile terminals, a method comprising: establishing a connection between the core network and one of a plurality of mobile terminals through the radio access network; a RAN node associating a temporary RAN identifier with the mobile terminal for the connection; and using the temporary RAN identifier in the RAN to assist in the transfer of information through the radio access network relating to the connection (page 3 lines 20-27 and page 11 lines 11-32).

Regarding claim 2, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the temporary RAN identifier is used to route information between one or more entities in the RAN involved in the connection (page 3 lines 20-27).

Regarding claim 3, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the connection is a packet-based connection and the temporary RAN identifier is included in each connection packet, the method further comprising: routing connection packets through the RAN using the temporary RAN identifier incorporated in each connection packet (page 3 lines 20-27 and page 11 lines 20-27). Claim 3 is alternatively rejected under 35 U.S.C. 103(a) below.

Regarding claim 4, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the radio access network includes a first node associated with a first geographical coverage area and a second node associated with a second geographical coverage area, the method further comprising: using the temporary RAN identifier in those packets corresponding to the connection to direct those packets to the first node (page 14 line 4 to page 17 line 34).

Regarding claim 5, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further disclose that the mobile terminal moving from the first coverage area to the second coverage area re-establishes the connection using the temporary RAN identifier (page 14 line 4 to page 17 line 34).

Regarding claim 6, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the temporary RAN identifier includes a node identifier corresponding to the node through which the connection was initially established and a mobile terminal identifier (page 3 lines 20-27, page 11 lines 20-27 and page 14 line 4 to page 17 line 34). Claim 6 is alternatively rejected under 35 U.S.C. 103(a) below.

Regarding claim 7, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the node identifier corresponding to the node through which the connection was initially

established and the mobile terminal identifier are employed when making initial contact in a new geographical coverage area (page 14 lines 4 to page 15 line 21).

Regarding claim 8, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that only the mobile terminal identifier being employed after making initial contact in the new geographical coverage area (page 14 lines 4 to page 15 line 21).

Regarding claim 9, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the temporary RAN identifier including a node identifier corresponding to the node through which the connection was initially established and a mobile terminal identifier, the method further comprising the routing of packets associated with the connection between the first and second nodes using a shortened temporary RAN identifier that lacks the node identifier (page 14 lines 4 to page 15 line 21).

Regarding claim 10, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the first node is an initial RAN node that controls the connection from perspective of the core network and the second node is another RAN node that currently serves the mobile terminal (page 14 line 4 to page 17 line 34).

Regarding claim 11, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses discontinuing the use of the temporary RAN identifier when the established connection is terminated (page 4 lines 25-34).

Regarding claim 13, MUSTAJARVI et al discloses a radio communications system including a core network coupled to a radio access network (RAN) and a plurality of mobile terminals where a connection between the core network and one of a plurality of mobile terminals located in a first geographical area may be established through the radio access network, a method comprising: associating a first RAN identifier with the one mobile terminal for the connection to be established; using the first RAN identifier to assist in handling the connection in the radio access network when the one mobile terminal initially communicates with the radio access network from a second geographical area; and using a second RAN identifier to assist in handling the connection in the radio access network after the initial communication by the one mobile terminal from the second geographical area (page 3 lines 20-27, page 11 lines 11-32 and page 14 line 4 to page 17 line 34).

Regarding claim 14, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the first and second RAN identifiers are temporary (page 14 lines 4 to page 15 line 21).

Regarding claim 15, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the subject matter of the first RAN identifier being longer than the second RAN identifier (page 14 lines 4 to page 15 line 21).

Regarding claim 16, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the first RAN identifier includes a node identifier corresponding to a RAN node through which the

Art Unit: 2682

connection was initially established and a mobile terminal identifier (page 14 lines 4 to page 15 line 21).

Regarding claim 17, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the second RAN identifier includes the mobile terminal identifier but not the node identifier (page 14 lines 4 to page 15 line 21).

Regarding claim 18, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the radio access network includes plural RAN nodes and one of the RAN nodes determines a RAN node address using one of the first and second RAN identifiers (page 14 lines 4 to page 15 line 21).

Regarding claim 19, MUSTAJARVI et al discloses a radio communications system including a core network coupled to a radio access network (RAN) including a first Radio Network Controller (RNC) associated with a first area and a second Radio Network Controller (RNC) associated with a second area and a plurality of mobile terminals, where a connection may be established between the core network and one of a plurality of mobile terminals located in the first area through the radio access network using the first RNC, a method comprising: the first RNC associating a temporary RAN identifier with the one mobile terminal for the connection; and when the mobile terminal re-establishes the connection with the second RNC, the first RNC communicates information associated with the connection with the second RNC using the temporary

RAN identifier (page 3 lines 20-27, page 11 lines 11-32 and page 14 line 4 to page 17 line 34).

Regarding claim 20, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the temporary RAN identifier includes an RNC identifier corresponding to the first RNC through which the connection was initially established and a mobile terminal identifier (page 14 lines 4 to page 15 line 21).

Regarding claim 21, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the temporary RNC identifier includes a RAN address of the first RNC (page 14 lines 4 to page 15 line 21).

Regarding claim 22, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses determining an address of the first RNC using the temporary RNC identifier (page 14 lines 4 to page 15 line 21).

Regarding claim 23, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses including additional RAN information in a message to the second RNC (page 14 lines 4 to page 15 line 21).

Regarding claim 24, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the additional information includes area information that permits the first RNC to route a message for

the mobile terminal to the RNC controlling the area that the mobile terminal is currently located (page 14 lines 4 to page 15 line 21).

Regarding claim 26, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the temporary RAN identifier includes a first RNC ID and a first mobile terminal ID associated with the first RNC (page 14 lines 4 to page 15 line 21).

Regarding claim 27, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the connection is established with the first RNC, control or user-data are sent between the mobile terminal and the first RNC using only the first mobile terminal ID (page 3 lines 20-27).

Regarding claim 29, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses determining a RAN address of the first RNC using the temporary RAN identifier; and using the determined RAN address of the first RNC in a subsequent message to be routed from the second RNC to the first RNC (page 14 lines 10-21).

Regarding claim 31, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the connection is terminated, using the temporary RAN identifier in association with another (page 14 lines 10-21).

Regarding claim 32, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses the first RNC

determining another RAN identifier corresponding to the second RNC; and the first RNC using the other RAN identifier to route a message associated with the connection to the second RNC (page 14 lines 10-21). This would occur when the mobile station roams into back into the area of the first SGSN and having roamed from the first SGSN to the second SGSN.

Regarding claim 33, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses assigning a second mobile terminal ID to the mobile terminal for this connection; and employing the second mobile terminal ID to direct control or user data between the mobile terminal and the second RNC (page 14 lines 4 to page 15 line 21).

Regarding claim 34, MUSTAJARVI et al discloses a radio communications system including a core network coupled to a radio access network (RAN) and a plurality of mobile terminals, a RAN node comprising: a memory having at least one region for storing computer executable program code; and a processor for executing the program code stored in the memory, wherein the program code includes code responsive to a request to communicate with or by one of the mobile terminals to establish a connection between the core network and the one mobile terminal through the radio access network and to associate a temporary RAN identifier for the connection; and code responsive to a message from the core network that uses the temporary RAN identifier to assist in a transfer of information in the radio access network (page 2 lines 1-15, page 3 lines 20-27, page 11 lines 11-32 and page 14 line 4 to page 17 line 34).

Regarding claim 36, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the code is responsive to a cell update message from the mobile terminal including the temporary RAN identifier to assist in a cell update operation relating to the mobile terminal (page 13 lines 9-18 and page 17 line 35 to page 19 line 20).

Regarding claim 37, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the code is responsive to a registration area update message from the mobile terminal including the temporary RAN identifier to assist in a registration area update operation relating to the mobile terminal (page 13 lines 20-18 and page 17 line 35 to page 19 line 20).

Regarding claim 38, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the code is responsive to a forward handover message from the mobile terminal including the temporary RAN identifier to assist in a forward handover operation (page 14 line 4 to page 17 line 34).

Regarding claim 39, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the code is responsive to a message from another RAN node involved in the connection to determine a RAN address of the other RAN node (page 14 line 4 to page 17 line 34).

Regarding claim 40, MUSTAJARVI et al discloses a radio communications system including a core network coupled to a radio access network (RAN) and a plurality of mobile terminals, where a connection may be established between the core

network and one of a plurality of mobile terminals through the radio access network, apparatus comprising: means for associating a temporary RAN identifier with the mobile terminal for the established connection; and means for using the temporary RAN identifier to assist in the transfer of information through the radio access network (page 2 lines 1-15, page 3 lines 20-27, page 11 lines 11-32 and page 14 line 4 to page 17 line 34).

Regarding claim 41, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses means for using uses the temporary RAN identifier to transfer information between one or more entities in the RAN involved in the established connection (page 3 lines 20-27 and page 11 lines 20-27).

Regarding claim 42, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the connection is a packet-based connection and the temporary RAN identifier is included in each connection packet, the apparatus further comprising: means for routing connection packets through the RAN using the temporary RAN identifier incorporated in each connection packet (page 3 lines 20-27 and page 11 lines 20-27).

Regarding claim 43, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the radio access network includes; first node associated with a first geographical coverage area and a second node associated with a second geographical coverage area, the apparatus further comprising: means for using the temporary identifier in packets

corresponding to the established connection to direct those packets to the first node (page 3 lines 20-27, page 11 lines 20-27 and page 14 line 4 to page 17 line 34).

Regarding claim 44, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the mobile terminal moving from the first coverage area to the second coverage area re-establishes the connection using the temporary RAN identifier (page 14 line 4 to page 17 line 34).

Regarding claim 45, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the temporary RAN identifier includes a node identifier corresponding to the node through which the connection was initially established and a mobile terminal identifier (page 14 line 4 to page 17 line 34).

Regarding claim 46, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the mobile terminal may employ the node identifier corresponding to the node through which the connection was initially established and the mobile terminal identifier when making initial contact in a new geographical coverage area (page 14 line 4 to page 17 line 34).

Regarding claim 47, MUSTAJARVI et al discloses that the apparatus only the mobile terminal identifier after making initial contact in the new geographical coverage area (page 14 line 4 to page 17 line 34).

Regarding claim 48, MUSTAJARVI et al discloses that the temporary RAN identifier includes a node identifier corresponding to the node through which the

connection was initially established, the apparatus further comprising: means for routing packets associated with the connection between the first and second nodes using a shortened temporary RAN identifier that lacks the node identifier (page 14 line 4 to page 17 line 34).

Regarding claim 49, MUSTAJARVI et al discloses that the first node is an initial RAN node that controls the connection from the perspective of the core network and the second node is another RAN node that currently serves the mobile terminal (page 14 line 4 to page 17 line 34).

Regarding claim 50, MUSTAJARVI et al discloses a radio communications system including a core network coupled to a radio access network (RAN) including a first Radio Network Controller (RNC) associated with a first area and a second Radio Network Controller (RNC) associated with a second area and a plurality of mobile terminals, where a connection may be established between the core network and one of a plurality of mobile terminals located in the first area through the radio access network using the first RNC, a method comprising: the first RNC assigning a temporary RAN identifier and a first RNC mobile terminal identifier (MT ID) to the one mobile terminal for the connection; sending control or user data between the mobile terminal and the first RNC using the first RNC MT ID; if the mobile terminal re-establishes the connection with the second RNC, the first RNC communicates information associated with the connection with the second RNC using the temporary RAN identifier; the second RNC assigning a second RNC MT ID to the mobile terminal; and sending control or user data between the mobile terminal and the first and second RNC using the second RNC MT

ID (page 2 lines 1-15, page 3 lines 20-27, page 11 lines 11-32 and page 14 line 4 to page 17 line 34).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 6, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over MUSTAJARVI et al (WO 98/32304 A2) in view of RICHARDSON et al (WO 97/21313 A1).

Regarding claim 3, see the rejection of the parent claim concerning the subject matter this claim depends from. The examiner believes that MUSTAJARVI et al further discloses the subject matter contained in claim 3. See the rejection of claim 3 under 35 U.S.C. 102(a) above. However, should the applicant believe that MUSTAJARVI et al insufficiently discloses the subject matter of claim 3, RICHARDSON et al discloses that subject matter. Specifically, RICHARDSON et al discloses that the connection is a packet-based connection and the temporary RAN identifier is included in each connection packet, the method further comprising: routing connection packets through the RAN using the temporary RAN identifier incorporated in each connection packet (page 6 lines 1-7 and page 6 lines 22-28). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the

connection be a packet-based connection and the temporary RAN identifier include in each connection packet routing connection packets through the RAN using the temporary RAN identifier incorporated in each connection packet. This enables the data to be routed through the network.

Regarding claim 6, see the rejection of the parent claim concerning the subject matter this claim depends from. The examiner believes that MUSTAJARVI et al further discloses the subject matter contained in claim 6. See the rejection of claim 3 under 35 U.S.C. 102(a) above. However, should the applicant believe that MUSTAJARVI et al insufficiently discloses the subject matter of claim 6, RICHARDSON et al discloses that subject matter. Specifically, RICHARDSON et al discloses that the temporary RAN identifier includes a node identifier corresponding to the node through which the connection was initially established and a mobile terminal identifier (page 6 lines 1-7 and page 6 lines 22-28). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have that the temporary RAN identifier include a node identifier corresponding to the node through which the connection was initially established and a mobile terminal identifier. This enables the data to be routed through the network.

Regarding claim 7, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the node identifier corresponding to the node through which the connection was initially established and the mobile terminal identifier are employed when making initial contact in a new geographical coverage area (page 14 lines 4 to page 15 line 21).

Regarding claim 8, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that only the mobile terminal identifier being employed after making initial contact in the new geographical coverage area (page 14 lines 4 to page 15 line 21).

5. Claims 12, 35, 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over MUSTAJARVI et al (WO 98/32304 A2) in view of JOKIAHO et al (WO 95/28063 A2).

Regarding claim 12, see the rejection of the parent claim concerning the subject matter. However, the prior art cited in the parent claim does not disclose that when the established connection is a packet based connection, the method further comprising: discontinuing use of the temporary RAN identifier when the established connection is allocated a dedicated radio channel. JOKIAHO et al discloses that data could be sent via either a packet connection or a virtual packet connection using a dedicated radio channel (page 2 line 18 to page 3 line 29). When consider that MUSTAJARVI et al teaches not using the temporary RAN identifier when the packet connection in not in use (page 4 lines 25-34), JOKIAHO et al suggests discontinuing use of the temporary RAN identifier when the established connection is allocated a dedicated radio channel. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to discontinue use of the temporary RAN identifier when the established connection is allocated a dedicated radio channel. Using either a packet connection or a virtual packet connection using a dedicated radio channel allows for system flexibility.

Regarding claim 35, see the rejection of the parent claim concerning the subject matter this claim depends from. However, the prior art cited in the parent claim does not explicitly disclose that the code is responsive to a page message from the core network to use the temporary RAN identifier to assist in a page of the mobile terminal. JOKIAHO et al discloses use of a temporary RAN identifier to assist in a page of the mobile terminal from the core network (page 19 line 26 to page 20 line 25). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a temporary RAN identifier to assist in a page of the mobile terminal from the core network. This reduces the number of cells in which the mobile station needs to be paged thus saving network resources.

Regarding claim 51, see the rejection of the parent claim concerning the subject matter this claim depends from. However, the prior art cited in the parent claim does not explicitly disclose the first RNC sending a page request to the second RNC containing a first RNC identifier and the first RNC MT ID; and the second RNC paging the mobile terminal and the mobile terminal responding to the page using the first RNC identifier and the first RNC MT ID. JOKIAHO et al discloses first RNC sending a page request to the second RNC containing a first RNC identifier and the first RNC MT ID; and the second RNC paging the mobile terminal and the mobile terminal responding to the page using the first RNC identifier and the first RNC MT ID (page 16 line 26 to page 20 line 25). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made for the first RNC to send a page request to the second RNC containing a first RNC identifier and the first RNC MT ID; and the second

RNC paging the mobile terminal and the mobile terminal responding to the page using the first RNC identifier and the first RNC MT ID. This allows the mobile station of respond without first having to attach to the new SGSN.

Regarding claim 52, see the rejection of the parent claim concerning the subject matter this claim depends from. JOKIAHO et al further discloses the second RNC forwarding the page response to the first RNC along with the first RNC MT ID and the second RNC MT ID (page 16 line 26 to page 20 line 25).

6. Claims 25, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over MUSTAJARVI et al (WO 98/32304 A2) in view of an examiner's official notice

Regarding claim 25, see the rejection of the parent claim concerning the subject matter this claim depends from. However, the prior art cited in the parent claim does not disclose that the additional information includes radio condition information. Nevertheless the examiner takes official notice that it was known at the time of the invention for a mobile terminal to send to the network radio condition information. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the additional information includes radio condition information. This enables the network to do a number of things including power control and handover determination.

Regarding claim 28, see the rejection of the parent claim concerning the subject matter this claim depends from. However, the prior art cited in the parent claim does not disclose analyzing at the second RNC a packet corresponding to the connection including the temporary RAN identifier included in the packet; determining at the second

RNC from the temporary RAN identifier that the packet is to be routed to the first RNC; and routing the packet to the first RNC. Nevertheless, the examiner takes official notice that it was known at the time of the invention to analyze at the second RNC a packet corresponding to the connection including the temporary RAN identifier included in the packet; determining at the second RNC from the temporary RAN identifier that the packet is to be routed to the first RNC; and routing the packet to the first RNC.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to analyze at the second RNC a packet corresponding to the connection including the temporary RAN identifier included in the packet; determining at the second RNC from the temporary RAN identifier that the packet is to be routed to the first RNC; and routing the packet to the first RNC. This enables the packets to be routed via the proper SGSN in ongoing packet communications until the contexts indicating the new SGSN are established.

Regarding claim 30, see the rejection of the parent claim concerning the subject matter this claim depends from. MUSTAJARVI et al further discloses that the second RNC assigns a second mobile terminal ID to the mobile terminal, the method further comprising: sending control or user data between the mobile terminal and the second RNC using only the second mobile terminal ID (page 14 lines 4 to page 15 line 21).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JOSSE et al (US 6,104,929 A)

MONRAD et al (US 6,212,379 B1)

HAUMONT et al (US 6,233,458 B1)

EINOLA et al (US 6,438,370 B1)

LUPIEN et al (US 6,463,055 B1)

MUSTAJAVI et al (US 6,512,756 B1)

BACK et al (US 6,505,044 B1)

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond B. Persino whose telephone number is (703) 308-7528. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on (703) 308-6739. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Raymond B. Persino *RP*
Examiner
Art Unit 2682

RP

Lee Nguyen 12/15/03
LEE NGUYEN
PRIMARY EXAMINER